

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
14 April 2005 (14.04.2005)

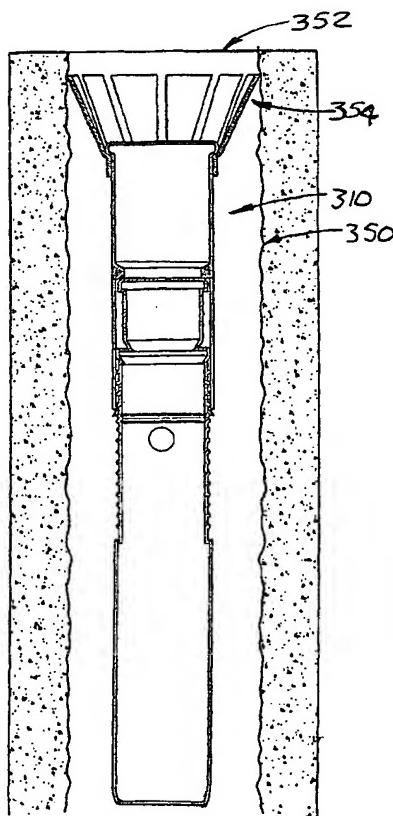
PCT

(10) International Publication Number
WO 2005/033474 A1

- (51) International Patent Classification⁷: E21C 37/16, (71) Applicant (for VN only): VAN DER WALT, Louis, F42D 1/20, 1/22 Stephanus [ZA/ZA]; 694 Vermeer Place, Moreleta Park, 0044 Pretoria (ZA).
- (21) International Application Number: PCT/IB2004/003194 (72) Inventors; and
- (22) International Filing Date: 30 September 2004 (30.09.2004) (75) Inventors/Applicants (for US only): HEINKE, Nils, Alberto [US/US]; c/o Route 1, Box 328-50, Elkins, West Virginia 2624 (US). SKAGGS, Roger, Dean [US/US]; 7430 House Street, Bonne Terre, MO 63628 (US). COLLINSWORTH, Stephen, Mitchell [US/US]; 839 Lower Hatchers Creek Road, Stanton, Kentucky 40380 (US).
- (25) Filing Language: English (74) Agent: FERREIRA, Stephanus, Cornelius; Adams & Adams, Adams & Adams Place, 1140 Prospect Street, Hatfield, P.O. Box 1014, 00001 Pretoria (ZA).
- (26) Publication Language: English (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
- (30) Priority Data: 2003/7749 3 October 2003 (03.10.2003) ZA
- (71) Applicant (for all designated States except US): INTERNATIONAL TECHNOLOGIES, LLC [US/US]; Route 1, Box 328-50, Elkins, West Virginia 26241 (US).

[Continued on next page]

(54) Title: BLASTING METHOD AND BLASTING ACCESSORY



(57) Abstract: A drill hole (350) extends into rock to be blasted. A blasting accessory (310) includes a container portion (312) for holding a predetermined volume of stemming material, and a spacer (330) for spacing the stemming material a predetermined distance from a surface, e.g. a blind bottom of the drill hole. The container portion has a top (320) surrounded by a dilatable, inverted skirt forming a seal (342), and forms a support for a blasting substance like an explosive.

WO 2005/033474 A1



GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

- (84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.